

AMENDMENTS TO THE CLAIMS

The following listing of the claims replaces all prior versions, and listings of claims in the present application.

Listing of Claims

We claim:

1. (Original) A neutral section for use with an overhead railway conductor line, which neutral section is disposed between the ends of said conductor line when in use, the neutral section comprising an insulator having a single, integral body to isolate the ends of said conductor line from each other; wherein the profile of the neutral section is designed such that, when the neutral section is in use, its neutral axis is aligned closely with the neutral axis of the conductors on its either side and the height of said insulator is chosen so that the stiffness and the dynamic mass of the neutral section closely match those of the conductors on its either side in both the vertical and horizontal planes.
2. (Original) A neutral section as claimed in claim 1, wherein the insulator is formed from a glass fiber reinforced epoxy composite.
3. (Original) A neutral section as claimed in claim 2, wherein the glass fiber reinforced epoxy composite contains a 45% glass fraction.
4. (Original) A neutral section as claimed in claim 1, further comprising connection members for connecting the neutral section to each end of said conductor line.
5. (Original) A neutral section as claimed in claim 4, wherein each connection member is a U-shaped member with two legs, said two legs protruding outwardly from the neutral section.
6. (Original) A neutral section as claimed in claim 5, wherein one of said two legs is used for connecting the neutral section to one end of said conductor line.
7. (Original) A neutral section as claimed in claim 5, wherein one of said two legs can serve as an arcing horn.

8. (Original) A neutral section as claimed in claim 4, wherein pegs are provided on the outer surface of each connection member.

9. (Original) A neutral section as claimed in claim 1, further comprising a low-friction member for providing a continuous running surface between the neutral section and each end of said conductor line, said low-friction member being disposed on the underside of the neutral section and lying parallel to the ends of the conductor line when the neutral section is in use.

10. (Original) A neutral section as claimed in claim 9, wherein said low-friction member is made of a low friction material.

11. (Original) A neutral section as claimed in claim 9, wherein glass beads are incorporated in the low-friction member.

12. (Original) A neutral section as claimed in claim 9, wherein said low-friction material is PTFE.

13. (Original) A neutral section as claimed in claim 9, comprising two such low-friction members forming a pair of rails.

14. (Currently amended) A neutral section as claimed in claim 1, wherein a semiconductor tape is attached to ~~[[the]]~~a spine of the neutral section.

15. (Currently amended) A neutral section as claimed in claim 1, wherein electrical plates are attached to ~~[[the]]~~a spine of the neutral section.

16. (Original) A neutral section as claimed in claim 15, wherein each of said electrical plates are made of epoxy resin with chopped strand glass fiber reinforcement.

17. (Original) A neutral section as claimed in claim 15, wherein the plates are spaced at a distance of 100 mm or more.

18. (Original) A neutral section as claimed in claim 15, wherein the plates have spherical surfaces.

19. (Original) A neutral section as claimed in claim 1, wherein the leading ends of the neutral section are upturned.

20. (Currently amended) A neutral section as claimed in claim 1, wherein a heater is incorporated in ~~[[the]]~~ a molding of the insulator.

21. (Original) A neutral section as claimed in claim 20, wherein the heater has a wattage of 150 W.

22. (Original) A neutral section as claimed in claim 20, wherein at least one temperature limiting resistor is connected in series to the heater.